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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,948	07/07/2003	Alon Adam	211-2US	6636
5568	7590	01/30/2006	EXAMINER	
JACK PAAVILA BOX 1151 ALEXANDRIA, KOC IA0 CANADA			KYLE, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,948

Applicant(s)

ADAM ET AL.

Examiner

Michael J. Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005 and 01 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-17 is/are pending in the application.
- 4a) Of the above claim(s) 8,13,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7,9-12,14,15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I in the reply filed on September 27, 2005 is acknowledged. The traversal is on the ground(s) that figure 3 should be grouped with Species I. This is not found persuasive because the embodiment shown in figure 3 is patentably distinct from that shown in figures 1, 2, and 4. Figure 3 shows a cylindrical step mounted snugly in the counterbore. Applicant argues that this step is merely an additional feature to the caster. Examiner respectfully disagrees. This step appears to be an alternative to the spacer ring 63. On top of this, the use of the step, rather than the space ring, requires the ball bearing to be mounted in the counterbore, and eliminates the possibility of the stock bearing being mounted in the counterbore. Figure 4 is grouped with figures 1 and 2 in Species I, because examiner considers the embodiment of figure 4 to be an obvious variant of the embodiment in figures 1 and 2. Figure 4 includes all of the same structural elements of figures 1 and 2. However, in figure 4, these elements are arranged in a manner that appears to be exactly reverse of that in figures 1 and 2.

2. Further, examiner notes applicant's election of claims 11, 6-8, 12, and 13. Applicant further argues that claim 14 should be examined. Examiner agrees that claim 14 should be examined and will address this claim in this Office Action. Claims 13, 8, 16, and 17, appear to be directed toward the embodiment shown in figures 3 and 5. The figures are not part of elected Species I. For the purpose of this Office Action, claims 8, 13, 16, and 17 are considered to be withdrawn as being directed to a non-elected species. If applicant believes this to be improper,

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applicant may traverse the restriction in the response to this Office Action. For the purpose of this Office Action, claims 1-5 are canceled, claims 8, 13, 16, and 17 are withdrawn, and claims 6, 7, 9-12, 14, and 15 are to be examined, as being directed to the elected Species I, depicted in figures 1, 2, and 4.

Claim Objections

3. Claim 11 is objected to for the limitation "the circular bore" in the last 2 lines of the claim. Examiner believes this should be -- the cylindrical bore --, to maintain consistent terminology throughout the claim. A cylindrical bore is provided for in line 6 of the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 7, 9-12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (U.S. Patent No. 652,128) in view of Warnock (U.S. Patent No. 1,421,626). With respect to independent claim 11, Martin discloses a swivel caster having a bottom caster member (g) with a cylindrical stub shaft (h) extend toward a top member (a). The top member includes a cylindrical bore (portion receiving h) and a cylindrical counterbore (portion receiving l) concentric about the bore. Martin further discloses a first bearing means (l) comprising a stock bearing mounted in the counterbore. This bearing transfers load from the top member to the

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bottom member. A second bearing means (c) comprising a ring of loose balls is mounted in the bore. Martin fails to disclose the second bearing means to be mounted in an annular raceway half formed in the cylindrical wall of the bore.

6. Warnock teaches a swivel caster assembly comprising a top member (5) and bottom member (6). A second bearing means (10) comprising a plurality of loose balls is mounted in an annular raceway, where half of the raceway is formed in cylindrical wall of a bore, in the top member (see figures 2 and 5). The other half of the raceway is formed in a stub shaft (on 6). Warnock uses this arrangement to receive side thrusts and facilitate swiveling of the caster (page 1, lines 60-63). The bearings also retain the stub shaft within the bore. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin as taught by Warnock, such that Martin's second bearing means (c) are mounted in an annular raceway, half of which is formed in the bore, to receive side thrusts.

7. With respect to claim 12, Martin discloses the counterbore in the top member forms an annular chamber about the stub shaft with the stock bearing press fit mounted within the counterbore. The raceway, as modified by the teachings of Warnock, is formed in the cylindrical wall of the bore and the cylindrical wall of the stud shaft. Examiner notes the limitation "press fit mounted" is a method limitation is an article claim (product-by-process). As long as the prior art is capable of being produced by such a method, and meets all of the structural limitations of the claim, the prior art is considered to meet the method limitation.

8. With respect to claims 6 and 7, Martin discloses the stock bearing to be a thrust bearing.

9. With respect to claim 14, Martin discloses a swivel caster having a bottom caster member (g) with a cylindrical stub shaft (h) extend toward a top member (a). The top member includes a

cylindrical bore (portion receiving h) and a cylindrical counterbore (portion receiving l) concentric about the bore. Martin further discloses a first bearing means (l) comprising a stock bearing mounted in the counterbore. This bearing transfers load from the top member to the bottom member. A second bearing means (c) comprising a ring of loose balls is mounted in the bore. The stub shaft is retained in the bore to connect the top and bottom members together. Martin fails to disclose the second bearing means to be mounted in an annular raceway half formed in the cylindrical wall of the bore. The arrangement disclosed by Martin is opposite of the arrangement claimed, i.e., in Martin the stub shaft extends from the bottom member, not the top member.

10. The claimed arrangement of the elements in claim 14 appears to be exactly reverse that of claim 11, and of also of that shown by Martin. This arrangement amounts to nothing more than a reversal of parts, and is considered obvious to one of ordinary skill in the art, as such a modification fails to bring about a new or unexpected result. It would have been obvious to one having ordinary skill in the art at the time of the invention, to reverse the arrangement of Martin such that the stub shaft extends from the top member and the bore and counterbore are formed in the bottom member, to receive the stub shaft and first and second bearing means.

11. Warnock teaches a swivel caster assembly comprising a top member (5) and bottom member (6). A second bearing means (10) comprising a plurality of loose balls is mounted in an annular raceway, where half of the raceway is formed in cylindrical wall of a bore, in the top member (see figures 2 and 5). The other half of the raceway is formed in a stub shaft (on 6). The bearings also retain the stub shaft within the bore. Warnock uses this arrangement to receive side thrusts and facilitate swiveling of the caster (page 1, lines 60-63). It would have been

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obvious to one having ordinary skill in the art at the time of the invention to modify Martin as taught by Warnock, such that Martin's second bearing means (c) are mounted in an annular raceway, half of which is formed in the bore, to receive side thrusts.

12. With respect to claim 15, Martin, as modified, discloses the counterbore in the bottom member forms an annular chamber about the stub shaft with the stock bearing press fit mounted within the counterbore. The raceway, as modified by the teachings of Warnock, is formed in the cylindrical wall of the bore and the cylindrical wall of the stud shaft. Examiner notes the limitation "press fit mounted" is a method limitation is an article claim (product-by-process). As long as the prior art is capable of being produced by such a method, and meets all of the structural limitations of the claim, the prior art is considered to meet the method limitation.

13. With respect to claims 9 and 10, Martin discloses the stock bearing to be a thrust bearing.

Response to Arguments

14. Applicant's arguments filed February 1, 2005 have been fully considered but they are not persuasive. It is noted that these arguments were filed in response to the First Office Action of November 2, 2004, but have not been addressed because of the intermediate restriction requirements.

15. Applicant argues that Martin uses two sets of individual ball bearings, and not stock bearings, as claimed. Applicant considers a stock bearing to be a bearing bought of a shelf. Examiner notes that absent any structural limitation further defining a stock bearing in the claims, the bearings of Martin are considered to be stock bearings. Additionally, the term "stock

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bearings” appears to refer to a type of process that the bearing is subjected to before insertion into the swivel caster. Process limitations in article claims are given little patentable weight.

16. Applicant argues that Martin does not disclose a stub shaft. Examiner respectfully disagrees, and notes that applicant has failed to address how the element (h), identified as the stub shaft in the first Office Action, does not meet the limitations of claimed stub shaft.

17. Applicant argues that the term “press fit mounted” is a structural limitation, not a method limitation. Examiner disagrees. It is unclear what structure is associated with “press fit mounted”.

18. Examiner also notes that the Warnock patent has been cited to show the claimed raceway configuration.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk



ROBERT J. SANDY
PRIMARY EXAMINER